

September 29, 2003

**INDIANA UTILITY REGULATORY
COMMISSION**



**TELEPHONE REPORT
TO THE
REGULATORY FLEXIBILITY
COMMITTEE OF THE
INDIANA GENERAL ASSEMBLY**

Chairman William D. McCarty

Commissioner David W. Hadley

Commissioner Larry S. Landis

Commissioner Judith G. Ripley

Commissioner David E. Ziegner

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1.0 Executive Summary/Highlights

“To promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new telecommunications technologies.”

Telecommunications Act of 1996

The Indiana Utility Regulatory Commission (“IURC” or “Commission”) continues to fulfill its legislative mandate to prepare and report to the Regulatory Flexibility Committee of the Indiana General Assembly on the status and impact of competition on universal service and on pricing of all telephone services under the jurisdiction of the Commission.

In this report, the IURC presents summary results from the Telecommunications Division’s Annual Local Competition Survey (“IURC Survey” or “Survey”) showing changes in the share of the voice service market statewide in 2002. Charts and maps in Section 2.0 give a summary of these changes. The report examines how competitive local exchange carriers (“CLECs”) deliver services. Using this report we offer our assessment of the evolving competitive telecommunications scene that has been driven by the landmark federal Telecommunications Act of 1996 (“TA-96”). Our assessment of the competitive landscape, however, is severely limited by the debate over confidentiality of company data. The Commission is working with Incumbent Local Exchange Carriers (“ILECs”) and Competitive Local Exchange Carriers (“CLECs”) to resolve this issue for reporting yearend 2002 and future years. While lacking public data, the Commission staff used publicly available FCC and telephone company sources for purposes of this report.

In assessing the level and growth of competition in Indiana, the Commission observes that there are fewer than 8.5 % competitive lines. This is an improvement from yearend 2001 when fewer than 6% of the lines were competitive. Much of this year’s competitive growth can be attributed to the Commission-ordered availability of the Unbundled Network Element Platform (“UNE-P”) – a combination of loop, switching and transportation, but the future of UNE-P will be determined by the release of the FCC’s pending rules in the so-called Triennial Review Order. That order will establish new conditions and timelines to be followed by incumbents and competitors. Future growth of competition in SBC’s territory will likely be impacted by SBC’s anticipated entrance into the long-distance market and the results of SBC’s pending UNE cost docket. Still, we take notice that 48% of the counties have fewer than 100 customers served by CLECs, in large part due to the sparse population and other high cost characteristics. Often telephone companies in these areas receive high-cost area subsidies to keep rates affordable. In contrast to rural areas, counties showing the greatest competitive penetration include Marion, Vanderburgh, Allen, and Lake. By line count and percentage penetration, Marion County is the most competitive in the state. The Survey estimates that 30% of competitive access lines are provisioned over facilities owned by the CLEC, 26% through UNE-P; 26% through UNE-Loop, 12% through total resale of ILEC services, and 6% by Intrastate Special Access.

Section 2.0 also comments on the importance of disaggregation of data, explains the UNE-P competition paradox, reviews the factors involved in wireline competition, and comments on alternatives to traditional wireline competition. We focus on four factors that affect wireline competition: access to parts of the ILEC’s network along with terms and conditions (“Network Access”), pricing of wholesale services, operational support systems (i.e., ordering of services from an ILEC), and anticompetitive behavior. If CLECs cannot obtain access to network elements, if the prices ILECs charge are not based on cost, or if CLECs cannot efficiently order products/services from the ILEC, the market for wireline telecommunications will not flourish. Finally, anticompetitive behavior by the ILEC or CLEC will result in diminished competition.

Within the section discussing operational support systems, we discuss SBC Indiana's status regarding its ability to provide long distance service in-region. On July 17, 2003, SBC Indiana filed its application to provide long distance service in-region with the Federal Communications Commission ("FCC"). On August 6th, 2003, the IURC issued its report and comments to the FCC in support of SBC Indiana's application. The FCC and the Department of Justice will review SBC's joint application from Illinois, Wisconsin, Ohio, and Indiana, and render its decision by October 15, 2003. The final approval means that local markets are fully and irreversibly opened to competition and that SBC has demonstrated sufficient accuracy of its systems data and wholesale billing reliability. The IURC supported the application based on SBC Indiana's agreement to specific compliance and improvement plans as well as our reliance on the FCC for resolution and enforcement powers that this Commission lacks.

Given the difficulty of effectively competing through the use of the traditional incumbent's telecommunications network, and the especially low numbers for residential competition, the IURC is encouraged to see several technologies being developed that provide complete bypass of the incumbent's network. Today, however, we see only telephone service over cable lines as an alternative that decreases the ability of wireline providers to exercise market power.

Broadband access to the Internet is an important policy concern in Indiana. The IURC remains vigilant to ensure Indiana has the latest telecommunications infrastructure capable of supporting advanced services, and Hoosiers have the widest choice of telecommunication carriers and services. Using data gathered in the IURC and FCC surveys, we report the number of high-speed broadband Internet access lines provided by ILECs and CLECs. Results from the data show Indiana experienced significant growth in the availability of high-speed Internet access via digital subscriber lines ("DSL"). Broadband connections increased to nearly 206,000 across the state, with telephone companies providing 45% of the connections while cable, fixed wireless, and satellite accounted for the balance. Section 3.0 reports on the status of broadband access in Indiana, including a discussion of Indiana Interconnect – a report sponsored by the Indiana Economic Development Council, the Indiana Department of Commerce, and the Central Indiana Corporate Partnership of the statewide initiative to assess and improve Indiana's advanced communications infrastructure. We also report on broadband's role in community development and one potentially emerging broadband technology – broadband over power lines. The IURC believes Indiana will benefit by adopting a state-wide broadband strategy and creating a broadband initiative to follow-up the initial mapping and study as part of Indiana Interconnect. Further, innovative local solutions must be communicated and replicated throughout the state. Finally, we encourage the legislature to develop innovative incentives for broadband deployment and investment both for demand and supply-side growth.

As competition increases in the telecommunications industry the IURC must develop policies to act more quickly to petitions before the Commission and work to streamline filing procedures. Section 4.0 discusses policies developed by the IURC to streamline its procedures. One of ways to streamline complex cases is to designate IURC staff as testimonial. For example, IURC staff is testimonial in cases involving the largest Indiana telephone companies, SBC, Verizon, and Sprint to increase regulatory flexibility. Such agreements are typically multi-year agreements that balance customer interests and competitive market flexibility. The companies have each agreed to procedural schedules that include tracks for both litigation and settlement.

The Commission has implemented many policies created by TA-96 to create a competitive wireline telecommunications market. Although competition is developing in Indiana, further growth is expected. To maintain a healthy competitive market, the IURC continues to need increased authority to act in the best interest of the public; specifically the authority over mergers and acquisitions between holding companies. Section 5.0 further discusses this additional legislative authority.

Highlights

Summary Data***	Year-End 2002*	Year-End 2001	Year-End 2000**
Incumbent (ILEC) Share of Voice Wireline Services – Statewide	91.6%	94.1 %	94.8%
Competitive (CLEC) Share of Voice Wireline Services – Statewide	8.4%	5.9 %	5.2 %
ILEC Voice Wirelines in Service	3,900,000	3,821,000	3,691,000
CLEC Voice Wirelines in Service	<u>357,000</u>	<u>241,000</u>	<u>203,000</u>
Total Wirelines in Service	4,257,000	4,062,000	3,894,000
Wireless Subscribers	2,356,000	1,897,000	Not Available
Statewide ILEC Residential Lines / % Share	2,364,000 94.1%	2,510,000 98.0 %	2,505,000 97.8 %
Statewide CLEC Residential Lines / % Share	149,000 5.9 %	50,000 2.0 %	56,000 2.2 %
Statewide ILEC Business Lines / % Share	1,546,000 88.1%	1,311,000 87.3 %	1,186,000 89.0 %
Statewide CLEC Business Lines / % Share	208,000 11.9%	191,000 12.7%	147,000 11.0 %
Voice Wireline Growth Rate	4.8 %	4.3 %	7.9 %
ILEC Wireline Growth Rate	2.1 %	3.5 %	3.7 %
CLEC Wireline Growth Rate	48.1 %	18.7 %	405.4 %
ILECs Doing Business in Indiana	41	41	41
CLECs Doing Business in Indiana	44	40	46
Number of CLECs and ILECs Offering DSL	50	42	20
ILEC Wire Centers Supporting DSL	187	138	25
Number of Broadband Access Lines Reported to the IURC by All Respondents	93,000	77,000	Not Available

* Estimated data was used because some carriers appealing the IURC's ruling on the confidentiality of data.

** Adjusted based on revised data provided by several carriers for year end 12/31/00.

*** All data on subscribership is rounded to the nearest 1000.

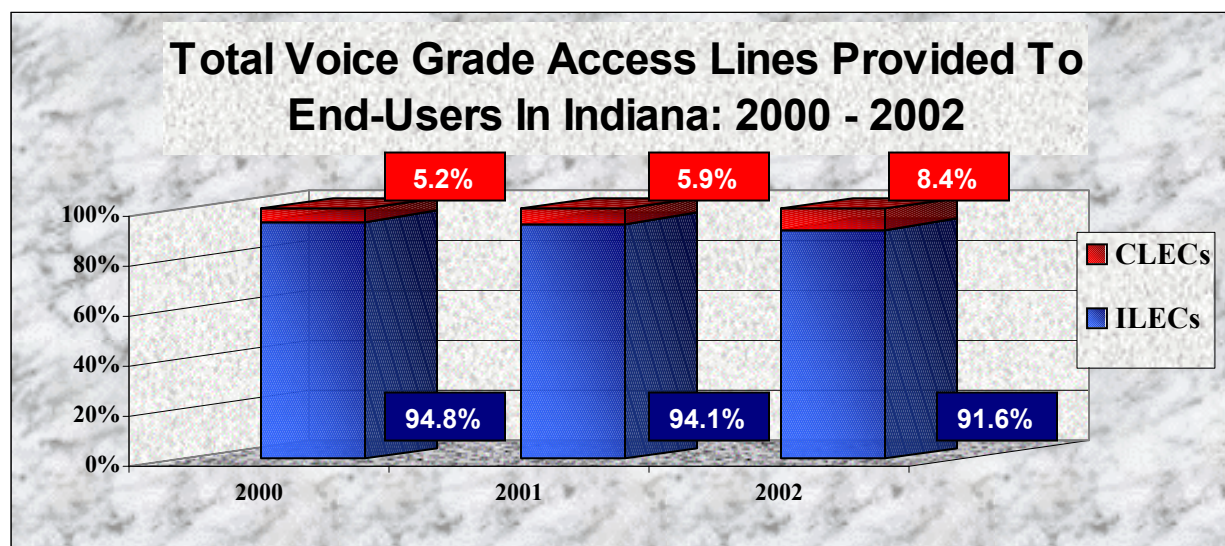
2.0 Competition is Developing Slowly in Indiana

The IURC technical staff conducts the “Annual Local Competition Survey” or “IURC Survey” yearly gathering data from January through December. The survey requests data on the number and type of incumbent local exchange carrier (“ILEC”) and competitive local exchange carrier (“CLEC”) lines and seeks information on broadband services. We also attempted to gather data on wireless carriers. To supplement our wireline and wireless data we report on data gathered by the FCC. Along with a review of the data, we also comment on the role of Unbundled Network Element Platform (“UNE-P”), factors involved in wireline competition, and alternatives to wireline service.

A. CLECs Have Obtained 8% of the Traditional Wireline Competition

In 2002 CLECs served about 357,000 customers, which constituted 8.4% of the total wireline services in Indiana. Chart 1 shows this number has grown since 2000 and CLEC’s share of the market has increased 2.5% percentage points since 2001. In the FCC Report total CLEC voice wirelines account for 8% of the lines in Indiana.¹ The small difference occurs because the FCC only collects data from companies with greater than 10,000 lines. Data from the FCC Report further shows Indiana at the bottom of the former Ameritech states in terms of overall competition with Michigan leading at 21%, Illinois at 19%, Wisconsin at 13%, and Ohio at 9%. The highest state reporting is New York at 25% and the lowest is Kentucky at 4%.

Chart 1



The growth figures for 2001 and 2002 show that the CLECs gained 116,000 customers in 2002, while ILECs only gained 79,000 customers. Disaggregating by the type of lines in Charts 2, 3, 4, and 5 shows an interesting pattern. Year 2002 revealed that the ILECs lost residential lines (about 146,000) while the CLECs gained residential lines (about 99,000), which was opposite of the results in 2001. Non-residential lines, which include business lines and special access lines, increased 235,000 lines for ILECs while CLEC non-residential lines only increased 17,000. This data is counter to the so-called “cherry-

¹ *Local Telephone Competition: Status as of December 31, 2002*, FCC Industry Analysis and Technology Division Wireline Competition Bureau, June 2003.

picking” theory of competition that argues CLECs will only market to business customers because they are charged a higher rate than residential customers.

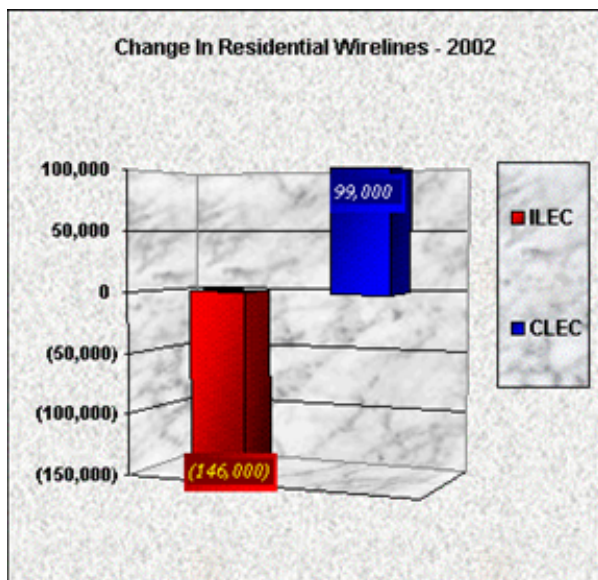
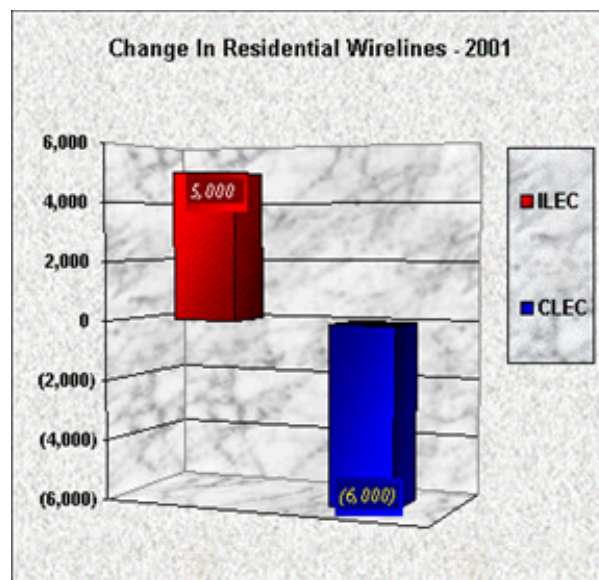
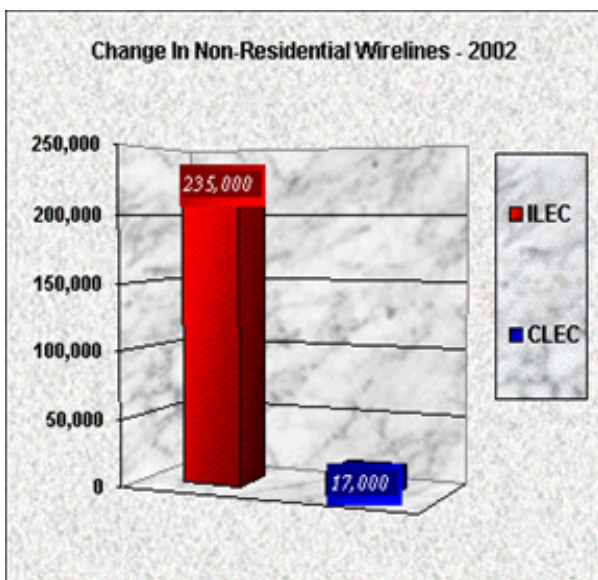
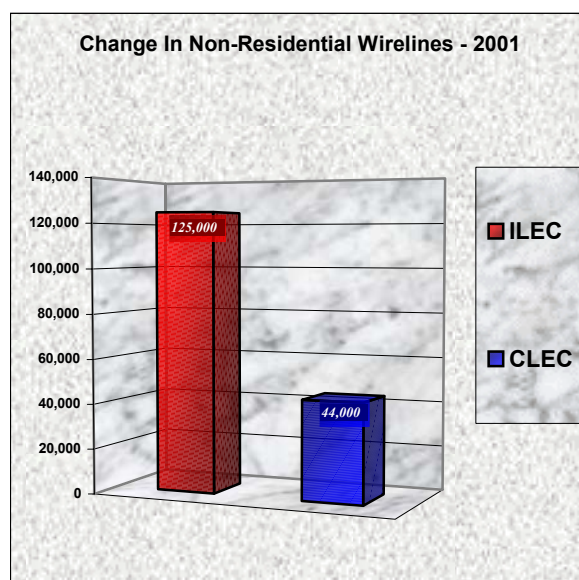
Chart 2**Chart 3****Chart 4****Chart 5**

Chart 6

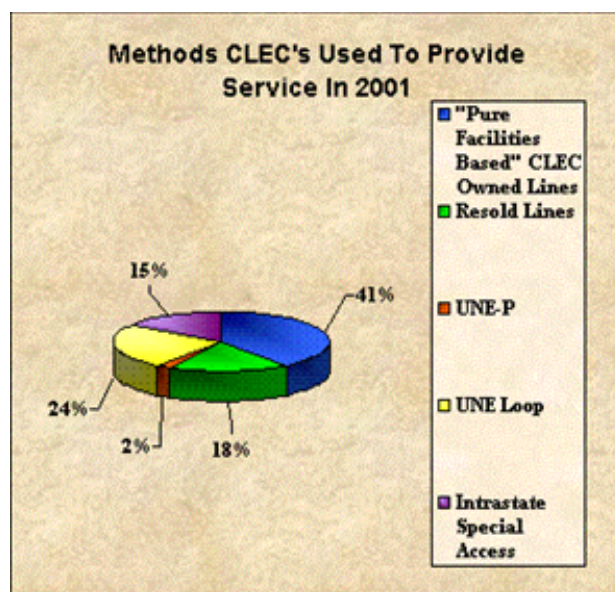
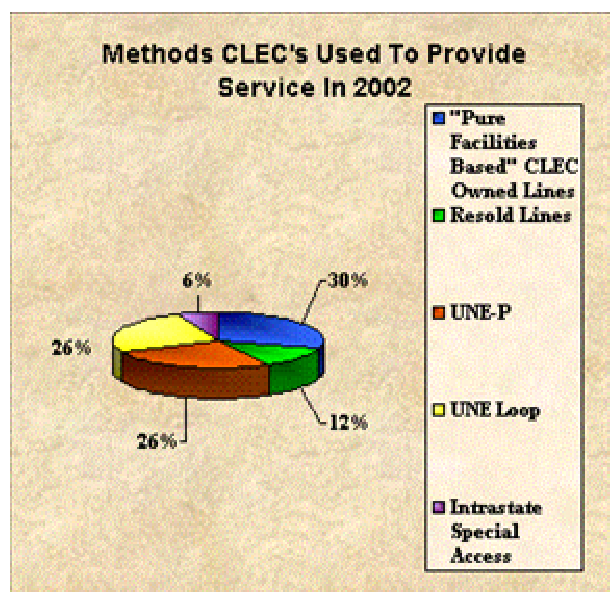


Chart 7



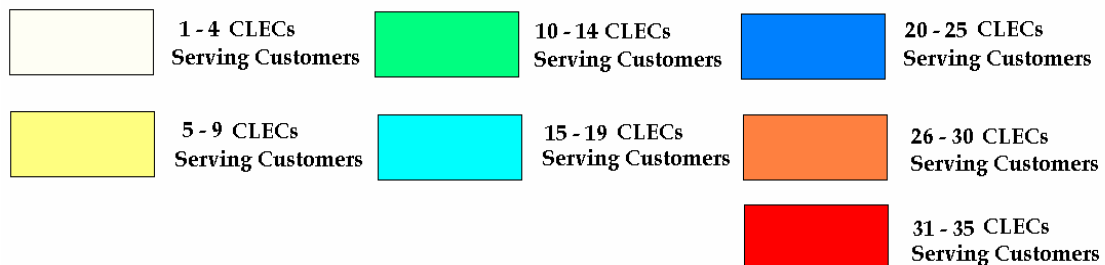
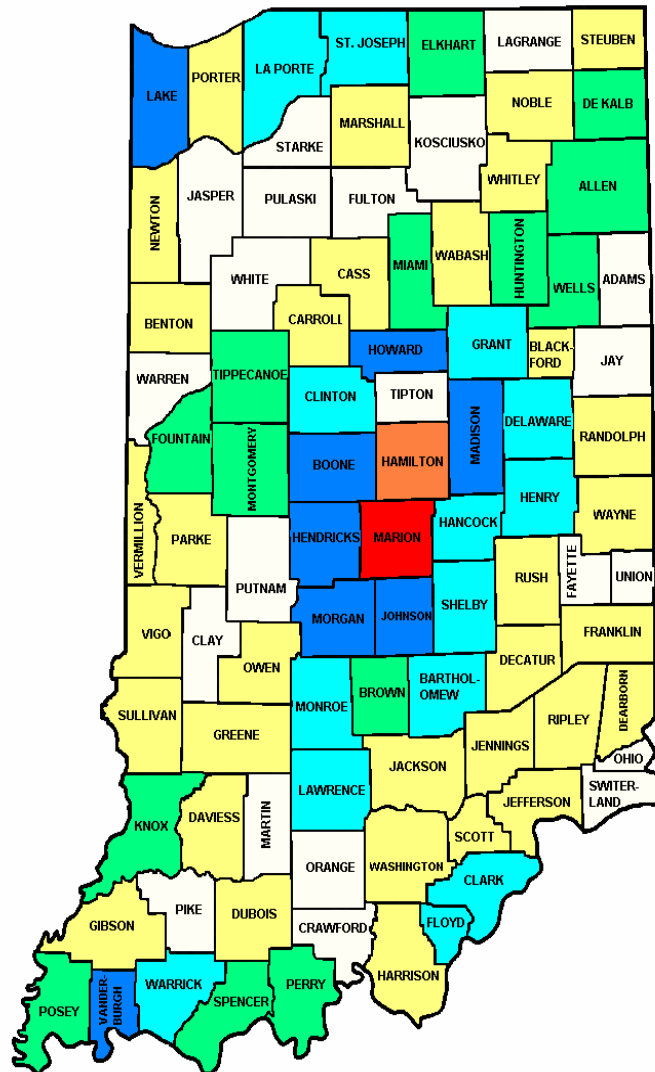
The Telecommunications Act of 1996 launched a new phase of local service competition by enabling interconnection of lines, resale of service, number portability, unbundling of network elements, and service parity for numerous functions. This has lead to several general methods by which companies compete with the incumbent carriers, as shown on Chart 6 and 7.

As displayed in Chart 7, the most frequently used method for CLECs to provide local service to their customers in 2002, is through the use of owned facilities ("**pure facilities-based**"). 30% of the CLEC lines are so provisioned. The second most frequently used methods at 26% each are **UNE-P** and **UNE loops**. UNE-P includes the loop, local switching, interoffice transport, tandem switching, and entrance facility. UNE-P is obtained from the ILEC at cost-based Total Element Long-Run Incremental Cost ("TELRIC") prices, requires no CLEC owned facilities, and permits the CLEC to collect long distance access revenues and reciprocal compensation. UNE-Loops, also known as unbundled local loops, are used for the last mile connection to customers. **Resold lines** accounted for 12% of the CLEC's service. Resellers obtain service from the ILECs at a retail discount (between 20% and 25%) and "resell" service. "**Special Access**" circuits (6%) are used when the CLEC orders a high capacity line from the incumbent telephone company to connect the customer to the CLEC.

The data also shows specific areas where competition is developing. Maps 1 and 2 on the next page show two geographic views of competition. Chart 8 shows the number of CLECs serving a specific county and Map 2 shows the number of residential and non-residential customers served by CLECs. From the two charts it is clear Marion County leads all counties in the total number of competitors and the total number of customers served by CLECs. Vanderburgh County had the second highest number of customers served by CLECs and customers had a choice of between 20 and 25 CLECs. On a disappointing note, 44 counties have less than 100 customers served by CLECs and 21 counties have between 1 and 4 CLECs serving that specific county.

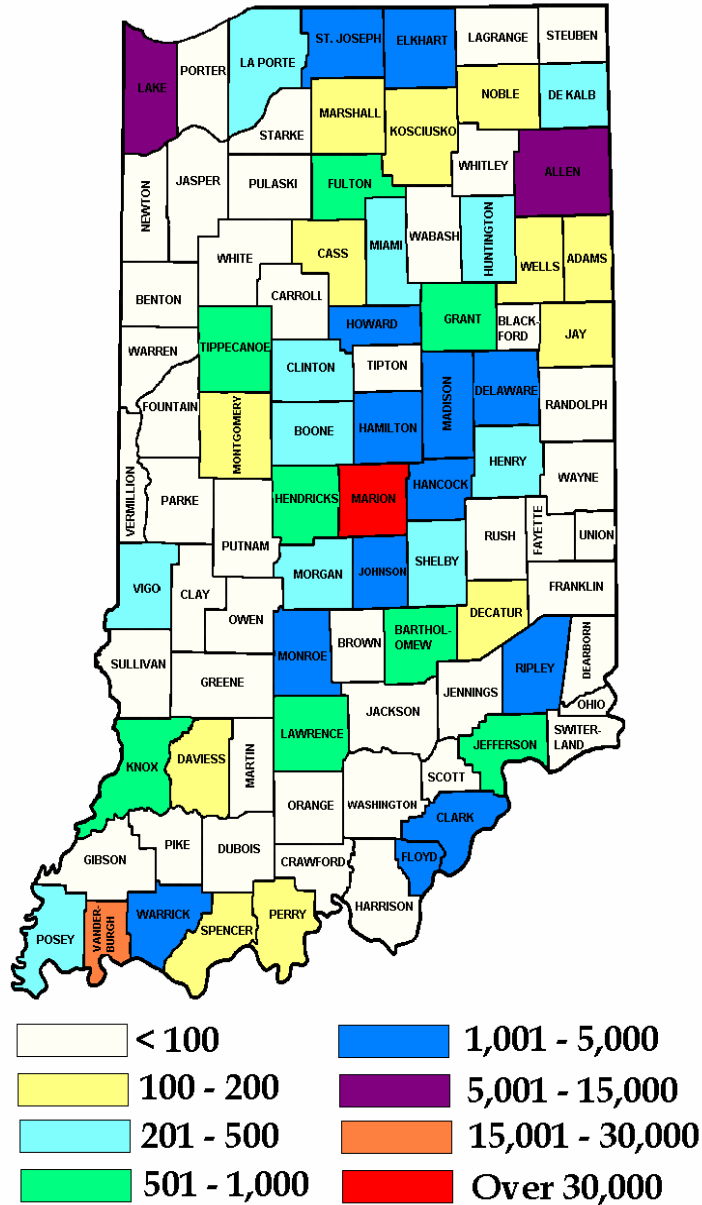
Map 1

CLEC Presence In Indiana By County



Map 2

Customers Served By CLECs (Residential & Non-Residential)



B. Without Sufficient Dissagregation Proper Analysis of the Data is not Possible

The IURC Survey requested data on a rate center specific basis. In past years the report has detailed competitive data on this same basis, but both ILECs and CLECs are concerned about publicly revealing strategic marketing information. The Commission is working with the industry to resolve this dispute in an equitable and appropriate manner. However, certain parties have made public pronouncements about purported losses of market share, customer attrition, and the state of the market. Without company specific data the IURC can neither confirm nor refute statements regarding the actual state of competition for an individual carrier.

C. UNE-P Competition Presents an Interesting Paradox

Charts 6 and 7 show that UNE-P providers now serve 26% of the CLEC market, up from only 2% in 2001. As stated earlier UNE-P requires no CLEC owned facilities. The IURC is monitoring this shift to UNE-P and will be addressing issues of economic and operational impairment once the FCC's long-awaited UNE review ("Triennial Review Order") is released.² On the other side, recent statistics show that CLECs using UNE-P are driving competitive entry and any restriction or elimination of UNE-P availability may reduce wireline competition for residential customers.

D. Many Factors Determine the Success of Wireline Competition

TA-96 sets out the requirements for ILEC's to open their wireline networks to competitors. We focus on four factors that affect wireline competition: access to parts of the ILEC's network along with terms and conditions ("Network Access"), pricing of wholesale service, operational support systems (i.e., ordering of services from an ILEC), and anticompetitive behavior.

1. CLECs Must Have Access to the ILEC's Network

Before competing with any ILEC, a CLEC must know the specific parts of the network of the ILEC's network available, along with the terms and conditions, so called "network access." In Indiana, network access usually has been settled by the parties in a voluntarily negotiated interconnection agreement that is filed with the Commission. In the rare cases where parties are unable to reach agreement, the Commission conducts an arbitration to resolve the disputed issues. In fact, this past year no arbitrations were filed in Indiana. Network access between two companies has also been the subject of IURC cost cases. In Cause No. 40611-S1 Phase II, the IURC resolved a number of issues regarding the obligations SBC has to serve CLECs. The most important issues were unbundling SBC's broadband deployment ("Project Pronto"), line splitting, and line sharing. The FCC indicated in a press release announcing the Triennial Review Order that among other issues, unbundling of fiber facilities would be addressed. Therefore, the IURC stayed the section of the Order requiring SBC to unbundle its Project Pronto service. This FCC decision will likely alter what elements ILECs are required to lease to CLECs.

² *In the Matter of Review of the Section 251 Unbundling Provisions of the Telecommunications Act of 1996*, CC Docket 01-338, NPRM released December 2001.

2. CLECs Must Have Cost-Based Wholesale Rates from the ILEC

Under TA-96 CLECs buy Unbundled Network Element (“UNEs”) at Total Element Long Run Incremental Costs (“TELRIC”) and a reasonable allocation of forward-looking joint and common costs in order to provide telecommunications services. The FCC created TELRIC in 1996 and the rates for elements are based on the use of the most efficient telecommunications technology currently available and the lowest cost network configuration, given the existing location of the ILEC’s wire centers. CLECs can also buy complete telecommunications services from ILECs at a resale discount based on avoided costs. The prices paid by CLECs to ILECs, like all input prices, will have an impact on the overall profitability of CLECs. If the prices paid by CLECs increase to the point where they are forced to increase retail prices, the ability of the CLEC to compete likely diminishes.

The resale discounts for Verizon and SBC were set several years ago and have not yet been altered. Sprint negotiated the resale discount in their voluntarily negotiated interconnection agreement and it was increased in their Alternative Regulatory Plan. Sprint, to date, has also successfully negotiated all of its UNE rates. Many of Verizon’s UNE rates have been set and proceedings are continuing to set other rates in Cause No. 40618-S1. Recently, the Commission opened an investigation into SBC’s UNE rates in Cause No. 42393. The case is being moved forward aggressively by the Commission, and we remain on schedule to issue an order by December 31, 2003. While the Commission was prepared to review all relevant rates established in earlier cases, SBC has focused on a selected few rates to alter, which include the loop and certain nonrecurring charges. SBC has proposed at least a doubling of the recurring charges for virtually every element which they have requested review. For example, it has proposed to increase the basic two-wire loop charge in Indianapolis from \$8.03 to \$22.10. This proposed rate compares with rates of \$2.59 in Illinois, \$8.47 in Michigan, \$5.93 in Ohio, and \$9.51 in Wisconsin. Increases of this magnitude, if implemented, could force CLECs to increase end-user rates for residential and business customers. If such an increase is approved, the IURC will need to carefully monitor its effect on competition in SBC’s territory. In order to monitor competition at this level the IURC needs company specific data. We will provide a preliminary report on September 30, 2003 on SBC’s UNE rate case and a final report on December 31, 2003 as part of Senate Concurrent Resolution 48.

3. CLECs Must be Able to Efficiently Order Products/Services from the ILEC

Along with the network access and prices paid for services, a key factor for competition is the ability of CLECs to order services from the ILEC successfully and efficiently. The IURC has been involved in a rigorous test of SBC’s Operational Support Systems for the past two years as a result of SBC’s Section 271 case, Cause No. 41657. Cause No. 41657 deals with SBC’s adherence to standards set out in Section 271 of TA-96. Section 271 of TA-96 establishes the criteria that a Regional Bell Operating Company (“RBOC”), such as SBC-Indiana, must meet in order to receive in-region, interLATA and interstate long distance authority for a particular state. These criteria include, but are not limited to, passing a 14-point checklist set forth in Section 271(c) of TA-96. We reported on the status of SBC’s 271 case on June 30, 2003 as part of Senate Concurrent Resolution 48. On July 2, 2003, the IURC issued a Compliance Order requesting SBC Indiana to file several compliance items similar to what have been filed in other formerly Ameritech States (Illinois, Michigan, Ohio, and Wisconsin) and modify a performance penalty plan filed by Time-Warner and SBC Indiana. On July 18, 2002 SBC filed a four state filing (Indiana, Illinois, Ohio, and Wisconsin) with the FCC for authority to provide in-region, interLATA and interstate long distance. On August 6, 2003, the IURC filed comments with the FCC in support of SBC Indiana’s application to offer long distance service.

4. Markets Cannot Thrive if Firms Behave Anticompetitively

While network access, prices, and appropriate ordering procedures can significantly contribute to a market where competition may flourish, companies within a market may behave anticompetitively. The antitrust literature is filled with examples of anticompetitive behavior such as price fixing (several companies agreeing on a price), predatory pricing (selling a product below cost to exclude competition), exclusive dealing (selling to specific customers), resale price maintenance (setting the retail price for a product), or tying arrangements (forcing a customer to buy a complementary product, e.g., razors and blades). Last year the IURC reported on a number of cases where anticompetitive behavior was claimed by one party. Those cases included SBC-Indiana's Winback promotions, SBC Indiana's Joint Tenant Services, SBC-Indiana's marketing practices, and AT&T's practices in provisioning services. All cases are still pending, except the case regarding joint tenant service which has been resolved by the parties. One way to reduce potential anticompetitive behavior is to require companies to have a code of conduct which provides guidelines on company behavior. The IURC has an ongoing investigation to examine structural separation for SBC Indiana, Cause No. 42998. As part of the proceeding the IURC has required SBC Indiana to file a code of conduct. We will provide a preliminary report on September 30, 2003 on the status of anticompetitive behavior and a final report on December 31, 2003 as part of Senate Concurrent Resolution 48.

E. Alternatives to Traditional Wireline Telecommunications Exist

Given the difficulty of effectively competing through the use of the traditional incumbent's telecommunications network, and the especially low numbers for residential competition, the IURC is encouraged to see several technologies being developed that provide complete bypass of the incumbent's network. Today, however, we see only telephone service over cable lines as an alternative that decreases the ability of wireline providers to exercise market power. In general market power is the ability of a company to raise prices above competitive levels for a significant period of time. Other dimensions of market power include diminished service quality, lower product quality, or reduced innovation. Below we briefly describe each technology.

1. Wireless Communications May Become a Substitute for Wireline Telecommunications in the Future

The IURC continues to study the substitutability between wireless and wireline services, and the effect of changes in calling patterns between wired lines and wireless lines. To date a number of surveys have reported that a small percentage of customers have completely abandoned wireline telephony for wireless phones. We also note the rapid growth and high percentage of customers in Indiana who have a cellular telephone. Based on FCC data from December 2002 and census data from 2000 approximately 49% of the eligible customers in Indiana have a cellular phone.³ We also take note of a report by the Yankee Group that indicated the average U.S. subscriber spends more time on the cellular phone than the wireline phone.⁴ This data does suggest a degree of substitutability.

From a regulatory and public policy perspective the question to ask is whether the level of substitutability limits the ability of wireline firms to exercise market power. A recent article, which includes rigorous empirical analysis, has, in our opinion answered that question.⁵ Although the data is a

³ This is not an exact figure. In calculating the percentage we deleted anybody less than 15 years old and the FCC's data does not include carriers with less than 10,000 customers.

⁴ "Cell Phones Calls Beat Out Wireline," *Billing World & OSS Today* June 2003, p. 10.

⁵ "Going Mobile: Substitutability Between Fixed and Mobile Access." Mark Rodini, Michael R. Ward, and Glenn A. Worsch, *Telecommunications Policy* 21 (2003) pp. 457-476.

few years old (2000-2001), we agree with the authors' statement that mobile service does not constrain local wireline service market power to any economically significant degree. We believe many customers are using their wireless phones for both intraLATA and interLATA toll calls and as a substitute for adding additional lines. We also agree with the authors who state that discrepancies are fading and prices for wireless services are still falling. Competition between wireline and wireless will accelerate once full number portability and ubiquitous wireless data access exists in the wireless industry. When wireless substitutability is sufficient to prevent the exercise of market power for all consumers, the IURC and the FCC will need to re-examine its entire regulatory environment for telecommunications companies. For example, wireless companies are not subject to the IURC's service quality standards or tariff requirements. Furthermore, wireless companies are not subject to the FCC's unbundling requirement.

The IURC attempted to collect data on wireless subscribership for 2002, but confidentiality concerns from many companies prevented the collection of all data. Our data does show that there are 11 wireless carriers doing business in Indiana including Cingular, Verizon, US Cellular, AT&T, Nextel, T-Mobile, Sprint, Centennial, SkyTel Corp., Cincinnati Bell, and Metro Electronic's Inc.

2. Cable Telephony is a Good Substitute for Wireline Telecommunications

Cable telephony has proven in some markets to be a very good alternative to the ILEC's voice network. By upgrading the co-axial cable for two-way communication, companies like Cox Cable provide a complete bypass of the ILEC's network. In Indiana no traditional cable company such as Insight Communication, Comcast, or Time-Warner Cable, has obtained a CTA and is offering voice service through co-axial cable. However, E-Com Technologies is providing a bundle of service including voice telephony, high-speed internet and cable TV over co-axial cable to a residential development in Carmel, Indiana.

3. VOIP Exists Today But is Not a Good Substitute for Wireline Telecommunications

Voice over the Internet Protocol ("VOIP") is a technology that uses the Internet to bypass the traditional telephone switching centers to complete voice calls (both local and toll). While the technology is developing, the IURC does not believe sufficient customers use the technology today to effectively compete with wireline voice telephony. A major hurdle for VOIP providers is that the phone for VOIP is dependent on the power source in the home, as opposed to traditional wireline telephony that does not require a power source in the home. "For that reason, most observers see VOIP for now as an attractive second home line, instead of a replacement for the Bell local service."⁶ Furthermore, since the calls go through the Internet a customer still needs some type of Internet connection and the system works best over broadband.

3.0 Broadband In Indiana

"People who lack advanced telecommunications services cannot utilize and benefit from them.

People who have not utilized and benefited from them are less likely to demand them.

People who do not demand them are not going to get them."

Thomas Rowley, "Rural Telecommunications: "Why Your Community Isn't Connected and What You Can Do About It", TVA Rural Studies, Staff Paper, 1999.

In last year's report we reviewed the definition of broadband access, the importance of broadband, the players in broadband services, and the status of broadband deployment. This year we continue our focus on broadband deployment and the role of broadband in economic development in Indiana, and we touch on an emerging broadband platform – broadband over power lines.

⁶ "Dialing for Dollars," Marcelo Prince, Wall Street Journal, May 19, 2003.

Recent studies by Aspen Publishing (4th quarter 2002) and Pew Charitable Trusts (2nd quarter 2003) indicate between 25 and 33 % of all online users in the United States connect to the Internet via broadband high speed connections. With a broadband connection customers can efficiently interact with the Web, accessing multi-media, distance learning, games and collaborative applications. Ultimately, high-definition digital television and other programming will be possible as greater bandwidth is ubiquitously available. The battleground is between technology platforms of the traditional telephone, cable, fixed wireless, and satellite providers.

A. Broadband is Being Deployed in Some Parts of Indiana

While broadband availability is expanding throughout Indiana, the IURC continues to encourage all telecommunications providers to deploy the necessary technology to avail their customers of broadband options. "Opportunity Indiana 2000", an agreement with SBC Indiana defining the regulatory framework for the company, required that broadband service will be available in 55 telephone central offices throughout the state by the end of 2003. SBC stepped up to that commitment and will complete deployment as planned. Filling in the availability gaps means not only equipping more of its offices but also filling in gaps where distance limitations or other operational barriers prevent wider reach. Similar challenges face the other two major carriers, Verizon and Sprint. Nearly 30 of the mid-sized and smaller ILECs have deployed broadband capabilities to some or all of their service area. The IURC is working with each of the telephone companies to insure the telephone infrastructure supports high-speed services. Several of these companies have formed competitive subsidiaries to provide high-speed service beyond their exchange or territorial limits.

Telephone companies, cable companies, and other suppliers to Indiana communities and businesses bring high speed access to the Internet only after exhaustive planning and investment. Numerous issues confront such companies including choice of technical platform, access to rights-of-way and customer connections, the rate at which customers subscribe to broadband or "take rate", and time it will take to recoup the investment or "payback rate."

Some Indiana businesses and interested parties have collaborated in private-public partnerships to take steps to develop and deploy high-speed services where neither the telephone nor cable companies chose to invest. Several case studies have been highlighted in a study, **INDiana INterconnect** report, and a conference sponsored by the Indiana Economic Development Council, the Indiana Department of Commerce, and the Central Indiana Corporate Partnership. Ft. Wayne is a classic case of engaging city government with "representatives from business, education and telecommunications to discuss connectivity needs. In all, more than 50 people had input..."⁷ Further, of significant interest, the Ft. Wayne case study suggests that "government should stimulate demand for broadband access, encourage private investment in building various network media (e.g., fiber optics, copper wire, coaxial cable, and wireless channels), and work with private providers to insure broadband availability."⁸ The Indiana Data Center was awarded the contract to develop a comprehensive solution in that city.

The **INDiana INterconnect** report, "*Connections in an Information Age: Indiana at Work and Home*", was released by Lieutenant Governor Joe Kernan, July 2003. This first comprehensive statewide report assessed Indiana's advanced communications infrastructure and identified broadband availability. (See <http://www.iedc.org/telecom/>). Maps included in the report display three layers of networks: first, middle, and last mile. These maps correspond to connectivity to the world, connections within Indiana nodes, and finally extension to networks to the user at home, at work, or mobile. The state map is

⁷ The **INDiana INterconnect** report, "*Connections in an Information Age: Indiana at Work and Home*" p. 6.

⁸ Id.

segmented showing availability in south, north and central segments of Indiana. By geography and population, the southern part of the state appears to be under-served although many grass-roots initiatives are underway in cities such as Bloomington, Columbus, and Scottsburg.

The following charts and maps show both FCC and IURC findings regarding broadband connections. FCC results include all suppliers including cable and satellite where over 250 connections are provided in the state. IURC results only consider services provided by nearly 50 ILECs, DLECs,⁹ and CLECs regardless of the number of connections.

Indiana ranks 27th among states in the number of high-speed connections to the Internet, and the number of connections increased 67 % during 2002 to nearly 206,000 connections according to a recently released FCC report¹⁰. The IURC's Annual Telephone Survey collected broadband data for incumbent and competitive telephone companies that show nearly 93,000 connections in 2002.

Chart 8

Comparison of FCC Study and IURC Study of Broadband Services in Indiana

FCC	ADSL	Coaxial Cable	Other ¹²	Total
Lines 12/02	63,463	114,237	28,246	205,946
Lines 12/01	22,385	78,837	22,482	123,704
Lines 12/00	6,442	37,052	17,000	60,494
IURC STUDY			Total	
Connections as of December 31, 2002			92,921	
Connections as of December 31, 2001			76,631	

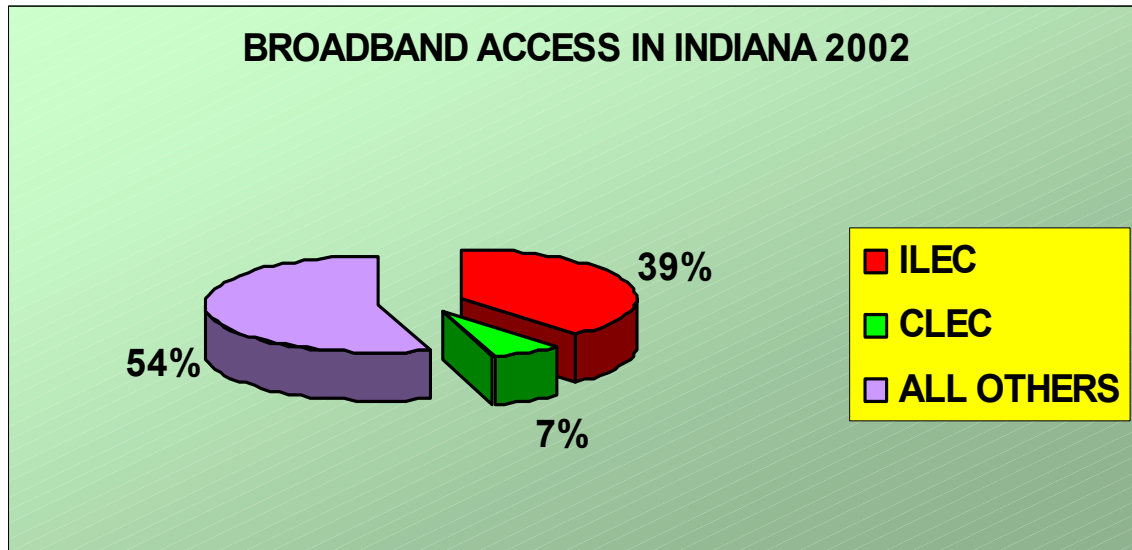
The chart on the next page indicates results from the FCC report depicting the “share of market” for broadband connections between LECs and others. Results show that almost 40% of the broadband connections are provided by ILECs

⁹ A Data LEC predominantly provides high-speed interconnection service, but not local voice service.

¹⁰ *High-Speed Services for Internet Access: Status as of December 31, 2002*, Industry Analysis and Technology Division, Wireline Competition Bureau, Federal Communications Commission, released June 10, 2003.

¹² Other refers to wireline technologies other than asymmetric digital subscriber lines (ADSL), optical fiber to the premises, satellite, and terrestrial fixed wireless systems.

Chart 9

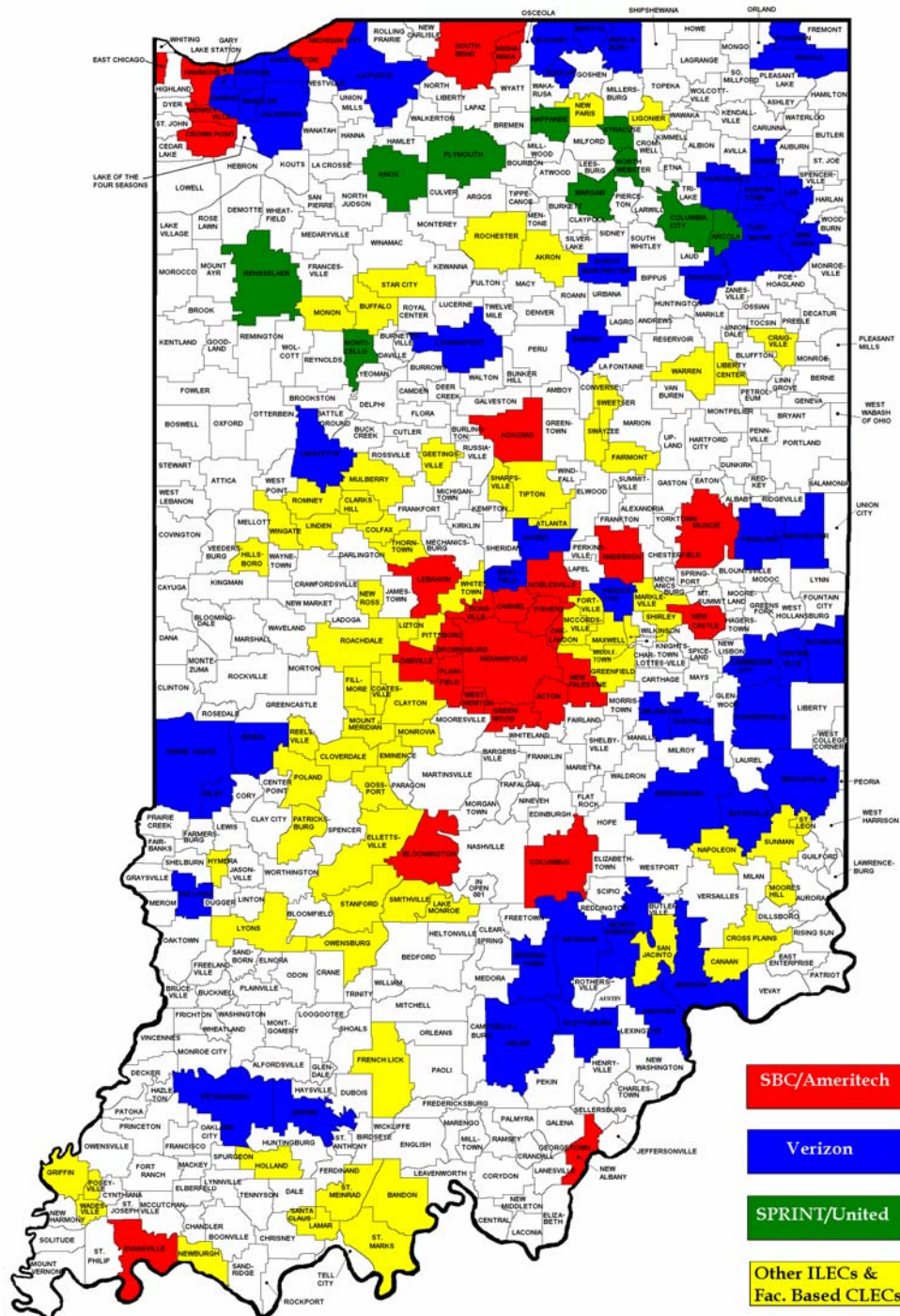


One indicator of broadband availability is wire centers equipped to offer high-speed Internet access, but that does not insure all customers can order the service. Availability to each customer depends on the need for further infrastructure or the distance a customer is from a central office. Rural ILECs have been successful in equipping a large percentage of their wire centers for DSL.

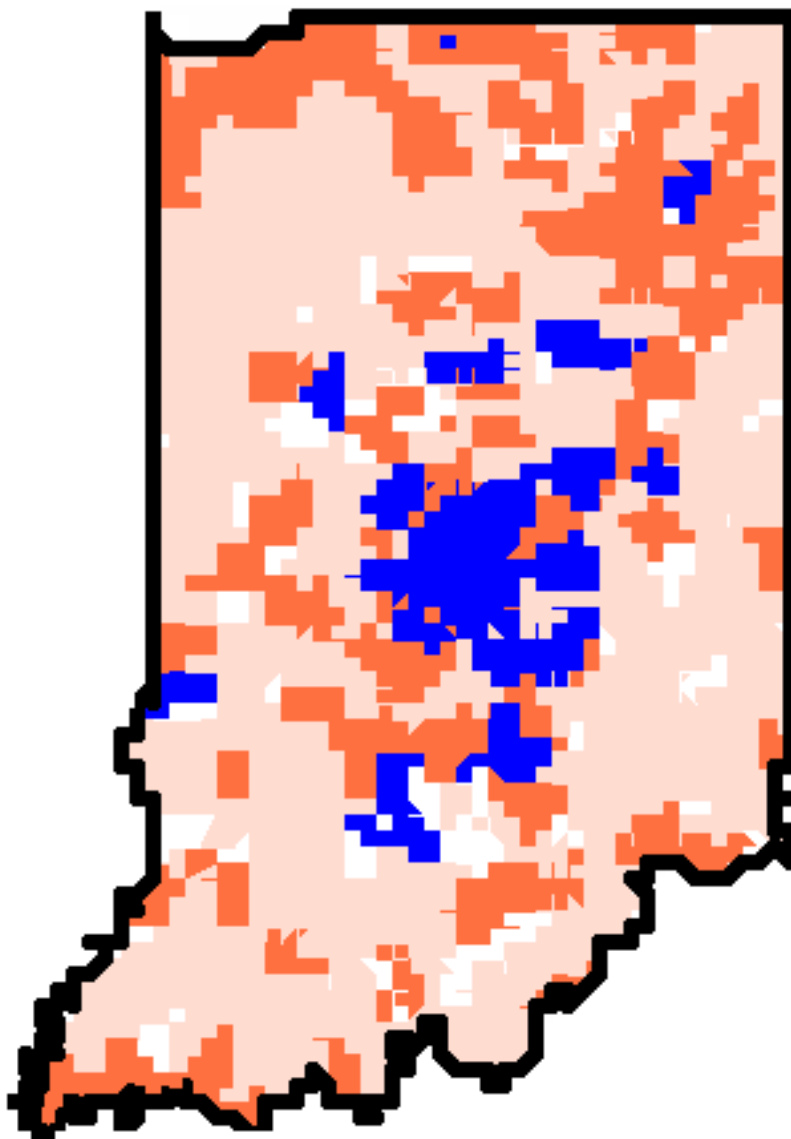
Following are two maps: the first indicates rate centers where telephone companies have some broadband deployed and the second high speed providers including DSL, coaxial cable, satellite for fixed wireless technology by zip code.

Map 3

Indiana Wire Centers
Capable of Providing
DSL Service
(within +/- 3 miles of the switch)



Map 4
High Speed Providers By Zip Code
(as of December 31, 2002)



Number of Reporting Providers*

- 7 or more
- 4 to 6
- 1 to 3

*Provider has at least one customer in Zip Code. Service may use ADSL, other wireline, coaxial cable, fiber, satellite or fixed wireless technology.

Source: High Speed Services for Internet Access: as of December 31, 2002, a June 2003 Report by the Industry Analysis and Technology Division, Wireline Competition Bureau of the FCC

B. Broadband Has an Important Role in Economic Development

Providing Broadband or high-speed access to the Internet and Advanced Communications Services is not merely a battle of competing technologies; it is an important policy concern with implications for economic development in Indiana. Economic development work by states and individual communities often contain statements of need for broadband infrastructure for business and consumers. If communities do not have immediate or affordable access, they are taking things into their own hands, and looking to deploy fiber or wireless connectivity such as in Allen and Shelby counties and cities like Scottsburg, Richmond, and Kokomo.¹³

Advanced telecommunications infrastructure is critical for economic development. The rise in Internet use for intra-company communications, supply chain management, customer service, distribution channels and government reporting has prompted site selection professions and business owners to add advanced telecommunications capability to their list of standard infrastructure requirements, much like water, roads and electricity. It follows, therefore, that a region must have access to adequate infrastructure of all types if its economic development efforts are to remain competitive. (Indiana Interconnect report, page 9)

In the Indiana Rural development Council's October 2002 report to the General Assembly, six of the 10 focus groups that contributed to the document cited lack of advanced telecommunications availability as a significant limiting factor for economic development. The U.S. Economic Development Administration funded a survey of manufacturing companies in economically distressed Indiana counties. The study indicated areas where unsatisfactory telecommunications service was the No. 1 concern. Members of the Governor's Technology Roundtable cited inadequate broadband availability as a constraint on attracting and maintaining technology companies in Indiana. (Indiana Interconnect Report, pages 22-23)

The Technology Network (TechNet), a national network of more than 200 CEOs and senior executives in the high technology and biotechnology communities, released a report July 17, 2003 rating states based on the extent to which their public policies spur or impede broadband deployment and demand. Michigan and Florida led as states providing continued technological and economic leadership; Indiana rated 13th overall. The panel suggests that with universal access to high-speed Internet connection, an estimated \$300 Billion could be injected into the U.S. economy each year.

The IURC makes the following conclusion: Indiana will benefit by adopting a state-wide broadband strategy and creating a broadband initiative to follow-up the initial mapping and study as part of **Indiana Interconnect**. Further, innovative local solutions must be communicated and replicated throughout the state. The IURC must work with telephone utilities in Indiana to insure infrastructure supports advanced communications services. The legislature is encouraged to develop innovative incentives for broadband deployment and investment both for demand and supply-side growth. Investments in e-learning applications, health services, and other e-government initiatives are important for future growth. The rewards for the state will be economic growth through jobs and business growth as well as more efficient government service delivery. TechNet calls for a goal of an affordable 100 Mbps broadband connection to 100 million American homes and small businesses by 2010. Indiana does not have specific, measurable deployment goals; however, the 2003 legislative session develops some

¹³ See the *Indiana Interconnect* report from the Indiana Economic Development Council and the Department of Commerce, planned for release July 2003.

supply and demand-side initiatives through I-Light2 and HB1001 Certified Technology Parks and Hoosier Business Investment Tax Credit.

C. Broadband over Power Lines May Be Another Mode of Broadband Deployment

The IURC is studying an emerging broadband option -- broadband over the power lines ("BPL").¹⁴ If successful, this form of broadband could be available in areas where DSL, cable, and wireless providers do not serve. Furthermore, in communities with existing broadband options, the introduction of BPL may lead to competitive effects such as lower prices, higher service quality, and greater innovation. In a recent trial in Potomac, MD, FCC Chairman Michael Powell viewed high-speed Internet, home networking, Internet Radio, Voice over IP, Internet gaming, and video-on-demand through the BPL connection. This technology is in the testing phase and the FCC recently opened a Notice of Inquiry to gain more information, particularly regarding unlicensed operation using certain electromagnetic spectrum.¹⁵ When the Notice of Inquiry and Notice of Proposed Rulemaking is completed, the FCC will issue a set of rules. After the rules are developed, the IURC anticipates that this technology platform will offer another mode of broadband deployment.

4.0 The IURC is Developing Procedures to Streamline Regulation

As competition increases the IURC must develop policies to act more quickly in response to petitions before the Commission and work to streamline filing procedures. In several docketed cases before the IURC, the IURC has created policies to decrease the time to conclude cases. In Cause No. 42144, a case related to the creation of a possible state universal service fund, staff was instructed to use a workshop setting to narrow the issues and help parties reach a settlement. Some of the parties did reach a settlement and it is before the Commission. In a step further, the IURC designated specific staff as testimonial in Commission proceedings to increase regulatory flexibility for the three largest Indiana telephone companies: SBC, Verizon, and Sprint. These proceedings typically result in multi-year agreements that balance customer interests and competitive market flexibility with infrastructure commitments. The companies have each agreed to procedural schedules that include tracks for both litigation and settlement. Finally, in an important cost docket, the IURC has set a schedule to develop certain unbundled network element ("UNE") prices for SBC Indiana by December 31, 2003, a proceeding which from start to finish will have taken about eight months. Unlike other cost cases, the IURC has developed procedures whereby final rates will be issued with the Order; in the past it took several months for the parties to develop final rates. We will provide a preliminary report on September 30, 2003 on developing a nine month time frame for all cases and a final report on December 31, 2003 as part of Senate Concurrent Resolution 48.

With regard to filing procedures, the IURC has developed a streamlined approval process for voluntarily negotiated interconnection agreements. Instead of the usual process of a docketed case that must be approved by the Commission, the interconnection agreement is posted on our website and if no comments are filed or the staff has no concerns, the interconnection agreement is deemed approved in thirty days. Furthermore, parties now have access to electronic versions of interconnection agreements instead of paper copies, making obtaining the agreement much more efficient.

¹⁴ Broadband over Power Lines, IURC Staff Report, June 2003.

¹⁵ *In the Matter of Inquiry Regarding Carrier Current Systems, including Broadband over Power Line Systems*, ET Docket No. 03-104, Released April 28, 2003.

The IURC has also streamlined the application process to obtain a Certificate of Territorial Authority (“CTA”) for some carriers. For CLEC reseller applications the approval time is 30 days and no hearing is required, if issues are not raised. Changes to the status of a company, such as issuance of debt or a name change, can be accomplished through a two-page form. We will provide a preliminary report on September 30, 2003 on the application process for CTAs and a final report on December 31, 2003 as part of Senate Concurrent Resolution 48.

Finally, the Telecommunications Division has developed a draft internal recommendation to reduce the time it takes to process changes to tariffs. Although the 30-day filing process is better than the lengthy process by which a company must file a formal petition to change its tariff, this process is still burdensome and many of the changes are routine.

5.0 The IURC Needs Legislative Authority Over Mergers and Acquisitions

Ind. Code § 8-1-2-83, the code section providing for authority over the sale of a public utility’s ‘franchise, works or system,’ has seen few changes since its enactment in 1913. It currently provides that, “No public utility, as defined in section 1 of this chapter, shall sell, assign, transfer, lease, or encumber its franchise, works, or system to any other person, partnership, limited liability company, or corporation, or contract for the operation of any part of its works or system by any other person, partnership, limited liability company, or corporation, without the approval of the commission after hearing.” That language served the IURC well for years. However, the manner in which companies are bought and sold has changed since the enactment of this statute – today, most transactions are completed through transfers of stock.

In 1999, the Indiana Supreme Court ruled that the IURC did not have authority under its statute to review mergers and acquisitions completed through stock transfers. The IURC had asserted jurisdiction over the purchase of Ameritech by SBC and the company had appealed that decision to the courts. The IURC had asserted jurisdiction over the transaction by citing the above mentioned code section and determining that “a transaction in which at least 50% of a public utility’s voting capital stock is sold, transferred, etc. necessarily constitutes the sale, transfer, etc. of that public utility’s franchise, works, or system.”

In Justice Boehm’s majority opinion on the matter he wrote, “The Commission and others make several compelling policy arguments, all of which boil down to the need for pre-merger investigation and approval by the Commission to protect the consumers of Indiana.” He concluded the Court’s opinion by stating that, “It may well be that it is more efficient or effective in protecting the interests of the citizens of our state for the Commission to have power to disapprove a shift in control of a utility, rather than simply power to regulate the utility after its ownership is transferred. However, those arguments are for the General Assembly, not this Court or the Commission.” Chief Justice Shepard dissented in that case saying, “The executive department has decided to stand its ground in the field of telecommunications. I regret that the judiciary has let it slip away.”

Since the 1999 decision, the IURC has sought to amend its statutory authority to include jurisdiction over such transactions. Each session, the IURC has set forth legislative proposals to close this gap in its authority – and each session, has been disappointed. During this time, the Commission has lacked jurisdiction over a few large telecommunications mergers and acquisitions occurring within Indiana, including the merger of Bell Atlantic and GTE to form Verizon.

Mergers are generally viewed with caution by federal and state regulatory agencies because the merged entity may be able to exercise increased market power resulting in anticompetitive pricing, lack of

product innovation and a decrease in the range and quality of service to the consumer. Mergers can also threaten state commerce by reducing job levels or draining employees from one state to another. Some mergers, however, result in substantial benefits to the shareholders, customers and employees of the merged companies. All proposed mergers or acquisitions should be objectively analyzed to identify the potential negative and positive outcomes. Indiana needs to participate in a review of the purchases, sales, and transfers of control of its public utilities. Specifically, any review should consider a transfer's effect on:

- Future investment in our communities;
- Employment opportunities and stability for Indiana's workforce; and
- Customer service.

The Indiana Commission, unlike other state commissions, has been unable to negotiate benefits to Indiana customers in return for approving the mergers. Our neighbors, Illinois, Ohio, and Kentucky, all have the ability to approve mergers within their borders. In Illinois, customers of Ameritech Illinois each received checks for \$50 from SBC after the merger, representing the savings of the merger to the company. Additionally, Ameritech Illinois has contributed approximately \$11 million to a Digital Divide Elimination Infrastructure Fund, which provides grants for companies to deploy broadband in underserved areas. Indiana customers received nothing.

While antitrust authorities, such as the Federal Trade Commission or Department of Justice at the federal level and the Attorney General on the state level have taken the lead in policing mergers and acquisitions, the IURC believes it also needs the authority to determine if a merger or acquisition is in the public interest. The IURC is a designated expert in the operations, pricing of services, and service quality of utilities under our jurisdiction and thus can determine accurately the detrimental effects of any merger or acquisition. Furthermore, state commissions are charged with ensuring the public interest is served, which is broader than traditional antitrust theory. For example, antitrust authorities are rarely worried about the role that merger savings have on the overall rates of the utility.

With the merger trend increasing, ratepayers in Indiana could benefit from the IURC having statutory authority to approve, disapprove, or set forth conditions on mergers and acquisitions by utilities within the state. The IURC is in a better position than most Federal agencies to analyze and evaluate the impacts of mergers involving its native utilities. Indiana should have the authority to review all aspects of a merger and the merging utilities should understand that regulatory action would be taken to ensure that ratepayers would not be in the position of being adversely affected by anticompetitive practices.

6.0 Acknowledgments

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<u>Telecommunications Division</u>	<u>Other Divisions</u>
<i>Mark Bragdon</i> <i>Principal Telecommunications Analyst</i>	<i>Mary Beth Fisher</i> <i>Director of Public Information</i>
<i>Joel Fishkin</i> <i>Assistant Director</i>	<i>Elizabeth Herriman</i> <i>Director of External Affairs</i>
<i>Sally Getz</i> <i>Principal Telecommunications Analyst</i>	<i>Joe Sutherland</i> <i>Chief Operating Officer</i>
<i>Jennifer Gilmore</i> <i>Principal Telecommunications Analyst</i>	
<i>Aisha Goens</i> <i>Principal Telecommunications Analyst</i>	
<i>Karl Henry</i> <i>Federal Affairs Specialist</i>	
<i>Rich Higgins</i> <i>Director</i>	
<i>Brian Mahern</i> <i>Principal Telecommunications Analyst</i>	
<i>Stephanie Singleton</i> <i>Tariff Administrator</i>	
<i>Kevin Sosbe</i> <i>Principal Telecommunications Analyst</i>	
<i>Pam Taber</i> <i>Assistant Director</i>	